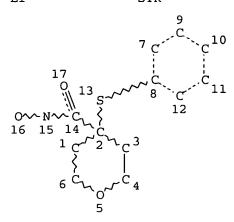
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MF C23 H22 N2 O5 S

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FILE COVERS 1907 - 18 Apr 2005 VOL 142 ISS 17 FILE LAST UPDATED: 17 Apr 2005 (20050417/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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     A.; Villamil, Clara I.; McDonald, Joseph J.; Freskos, John N.; Getman,
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     G.D. Searle and Co., USA
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     PCT Int. Appl., 840 pp.
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MARPAT 131:18929

US 2000-554082

B3

A3

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20000731

AB A process for treating conditions associated with pathol. matrix metalloproteinase (MMP) activity comprises administration of compds. having inhibitory activity against >1 of MMP-2, MMP-9, and MMP-13, while exhibiting substantially less inhibition of MMP-1. The compds. are of the form HONHCOCR1R2SO2R3 [R1, R2 = H; R1R2 = atoms to form a 5-8 membered ring containing 1-3 heteroatoms; R3 = (substituted) aryl, heteroaryl]. 4-PhOC6H4SH was heated in Me2SO to give the disulfide dimer, which in THF was added to a mixture of Et N-tert-butoxycarbonylisonipecotate (preparation given) and LDA in THF at -60° to room temperature to give 405 sulfide, which was oxidized with m-ClC6H4CO(OOH) to give 59% sulfone. The Et ester was saponified with NaOH in EtOH/H2O to give 100% acid, which in DMF was treated with hydroxybenzotriazole, EDC, 4-methylmorpholine, and aqueous NH2OH to give title compound (I). I inhibited MMP-2 with IC50 = 0.2 nM. IT 226390-38-1P 226393-32-4P 226393-35-7P

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study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
   (preparation of arylsulfonylheterocyclylhydroxamic acids and related compds.
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as matrix metalloprotease inhibitors)

RN 226390-38-1 CAPLUS

CN

2H-Pyran-4-carboxamide, 4-[[4-([1,1'-biphenyl]]-4yloxy)phenyl]sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

RN 226393-32-4 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-([1,1'-biphenyl]-4-ylsulfonyl)tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

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CN 2H-Pyran-4-carboxamide, tetrahydro-N-hydroxy-4-[(3'-nitro[1,1'-biphenyl]-4-yl)sulfonyl]- (9CI) (CA INDEX NAME)

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RN 226393-38-0 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[(4'-chloro[1,1'-biphenyl]-4-yl)sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

RN 226393-41-5 CAPLUS

CN 2H-Pyran-4-carboxamide, tetrahydro-N-hydroxy-4-[(4'-methyl[1,1'-biphenyl]-4-yl)sulfonyl]- (9CI) (CA INDEX NAME)

RN 226393-43-7 CAPLUS

CN 2H-Pyran-4-carboxamide, tetrahydro-N-hydroxy-4-[[4'-[2-(1-pyrrolidinyl)ethoxy][1,1'-biphenyl]-4-yl]sulfonyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 226393-42-6 CMF C24 H30 N2 O6 S

PAGE 1-A

PAGE 2-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2

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CN 2H-Pyran-4-carboxamide, tetrahydro-N-hydroxy-4-[[3'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]sulfonyl]- (9CI) (CA INDEX NAME)

RN 226393-48-2 CAPLUS

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RN 226393-50-6 CAPLUS

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RN 226393-54-0 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[(3',4'-dimethyl[1,1'-biphenyl]-4-yl)sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

RN 226394-51-0 CAPLUS

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CRN 76-05-1 CMF C2 H F3 O2

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CRN 226394-52-1 CMF C26 H32 N2 O7 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

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ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
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     G.D. Searle and Co., USA
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RN 226393-32-4 CAPLUS
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CN 2H-Pyran-4-carboxamide, tetrahydro-N-hydroxy-4-[[4'-[2-(1-pyrrolidinyl)ethoxy][1,1'-biphenyl]-4-yl]sulfonyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

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CRN 226393-42-6 CMF C24 H30 N2 O6 S

PAGE 1-A



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CRN 76-05-1 CMF C2 H F3 O2

RN 226394-47-4 CAPLUS

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CM 1

CRN 226394-46-3 CMF C22 H27 N3 O5 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

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L13 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:824220 CAPLUS

DN 134:17399

TI Aromatic sulfone hydroxamic acid metalloprotease inhibitors

IN Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Boehm, Terri L.; Carroll, Jeffrey N.; Decrescenzo, Gary A.; Fobian, Yvette M.; Freskos, John N.; Getman, Daniel P.; McDonald, Joseph J.; Hockerman, Susan L.; Howard, Susan C.; Kolodziej, Stephen A.; Li, Madeleine Hui; Mischke, Deborah A.; Rico, Joseph G.; Stehle, Nathan W.; Tollefson, Michael B.; Vernier, William F.; Villamil, Clara I.

PA G.D. Searle and Co., USA

SO PCT Int. Appl., 616 pp.

CODEN: PIXXD2

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IT 308823-70-3P 308827-37-4P 308827-51-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aromatic sulfone hydroxamic acids as metalloprotease inhibitors)

RN 308823-70-3 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[4-[4-([1,1'-biphenyl]-2-ylmethoxy)-1-piperidinyl]phenyl]sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

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CN 2H-Pyran-4-carboxamide, 4-[[4-[4-(4'-fluoro[1,1'-biphenyl]-2-yl)-1-piperidinyl]phenyl]sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

RN 308827-51-2 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[4-[4-[(2'-cyano[1,1'-biphenyl]-4-yl)methoxy]-1-piperidinyl]phenyl]sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

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L13 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:485162 CAPLUS

DN 141:38534

TI Preparation of aromatic sulfone hydroxamic acid metalloprotease inhibitors

IN Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Boehm, Terri L.; Carroll, Jeffrey N.; Decrescenzo, Gary A.; Fobian, Yvette M.; Freskos, John N.; Getman, Daniel P.; McDonald, Joseph J.; Li, Madeleine H.; Hockerman, Susan L.; Howard, Susan C.; Kolodziej, Steve A.; Mischke, Deborah A.; Rico, Joseph G.; Stehle, Nathan W.; Tollefson, Michael B.; Vernier, William F.; Villamil, Clara I.

PA Pharmacia Corporation, USA

SO U.S., 403 pp., Cont.-in-part of U.S. Ser. No. 311,837. CODEN: USXXAM

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IT 308823-70-3P 308827-37-4P 308827-51-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aromatic sulfone hydroxamic acids as metalloprotease inhibitors)

RN 308823-70-3 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[4-[4-([1,1'-biphenyl]-2-ylmethoxy)-1-piperidinyl]phenyl]sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

RN 308827-37-4 CAPLUS

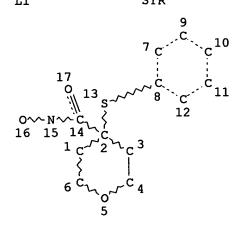
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RN 308827-51-2 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[4-[4-[(2'-cyano[1,1'-biphenyl]-4-yl)methoxy]-1-piperidinyl]phenyl]sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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